



TENASKA SEQUESTRATION SERVICES, LLC
LONGLEAF CCS HUB PIPELINE FEED STUDY – REQUEST FOR
PROPOSALS (RFP)

RFP-TNSK-2024-001

ISSUED: APRIL 3, 2024

Primary Contact:

Michael Nordell

Manager, Project Engineering

Phone: 402-691-9523

Email: MNordell@tenaska.com

Secondary Contact:

Ryan Choquette

Director, Engineering

Phone: 402-938-1641

Email: RChoquette@tenaska.com

Revision	Date	Description
0	3/15/2024	Initial issue
1	04/03/2024	Deadline extension (1 week)

TABLE OF CONTENTS

1. INTRODUCTION.....	2
2. PROJECT SUMMARY.....	2
3. RFP PROCESS	4
4. SCOPE AND SPECIFICATIONS	5
5. MINIMUM QUALIFICATIONS	5
6. ETHICS IN CONTRACTING	5
7. PROPOSAL NOT AN OFFER	6
8. WITHDRAWAL.....	6
9. LEGAL COMPLIANCE.....	6
10. PRICING	6
11. PROPOSAL EXPENSES	6
12. ERRORS OR OMISSIONS	7
13. FEED STUDY CONTRACT TERMS.....	7
14. DISCUSSIONS WITH RESPONDENT.....	7
15. EVALUATIVE FACTORS.....	8
16. SELECTION	8
17. NEGOTIATION.....	8
18. SILENCE.....	9
19. DISCLAIMER	9
20. TERMINATION FOR DEFAULT	9
21. TIMELINE	9

Longleaf CCS Hub – Pipeline FEED Study

1. Introduction

Tenaska Sequestration Services, LLC (“Tenaska”) is seeking proposals from qualified contractors that are interested in contracting with Tenaska to perform a front-end engineering and design (FEED) study for a carbon dioxide (CO₂) pipeline in accordance with the scope provided herein. The contract is to be funded through a Federal cooperative agreement that has been awarded to the Southern States Energy Board (“SSEB”) by the U.S. Department of Energy (the “Federal awarding agency”) and that is identified by Federal Award Identification Number DE-FE0032341 (the “Principal Agreement”), for Longleaf CCS Hub (the “Project”).

A potential contractor desiring to enter into a contract with Tenaska is called a “Respondent” in this Request for Proposals (“RFP”). To be considered for the FEED study contract under this RFP, a Respondent should carefully read this document and all attachments and referenced items. This RFP and the associated documents identify the services sought by Tenaska, contain the instructions for preparing and submitting a Proposal, and explain the process by which Tenaska will award a contract (although Tenaska reserves the right to reject any and all Proposals and not to award any contract).

Tenaska intends to enter into a contract with one qualified contractor selected by Tenaska based on the evaluative criteria in this RFP, satisfying the other requirements found in this RFP, and also meeting the requirements for a responsible contractor that possesses the ability to perform successfully under the terms and conditions of the proposed procurement transaction in accordance with the requirements found at 2 C.F.R. § 200.318. The contract will be on a lump sum basis with a guaranteed completion date and contain, in addition to the various certifications set forth herein, such other certifications, representations, warranties and covenants required for a Federal cooperative agreement funded activity and such other terms and conditions customary for similar agreements.

2. Project Summary

Longleaf carbon capture and sequestration (CCS) Hub is a project currently in development by Tenaska in Mobile County, Alabama. The project aims to transport CO₂ from various customers in the area and store it in a centrally located sequestration field. The Class VI permit application has been deemed administratively complete by the EPA and is currently in the Technical Review stage of the permit process.

The pipeline will be approximately 20 miles long and is intended to connect several customers in the area. The pipeline route has been broken into three segments. From north to south, the first segment connects AM/NS Calvert to the sequestration hub, the second segment connects Plant Barry to the sequestration hub, and the third segment connects SSAB Alabama to the pipeline network. An overview of the project is shown in the figures below.

Included with this RFP is a KMZ that contains the customer locations, injection well locations, and preliminary pipeline routes. The KMZ file shows two route options for each leg – option A in blue and option B in cyan – with infield piping shown in pink. These route options are intended to be a starting point and further refinement during the FEED study execution is expected.

Refer to Table 1 below for the design capacities of the nearby potential customers, in million metric tons per annum (MMtpa):

Customer	Facility Name	CO ₂ Emissions (MMtpa)		
		Minimum	Target	Maximum
ArcelorMittal and Nippon Steel Corp.	AM/NS Calvert	0.2	0.35	0.4
Southern Company	Plant Barry	1.0	1.4	1.6
SSAB	SSAB Alabama	0.3	0.35	0.4
8Rivers / SSEB	SEDAC Hub	.05	.05	.1

NOTE: Emissions are estimated based on discussions with customers, anticipated CO₂ capture type, and publicly available information. These values are subject to change.

Table 1: Longleaf Customer Emissions

The pipeline shall be capable of transporting the maximum capacity as shown in Table 1, plus an additional 4.0 MMtpa. The additional 4.0 MMtpa should be considered as future expansion capacity to the southern portion of the proposed route, near Plant Barry, via a separate pipeline at a later phase in the project.

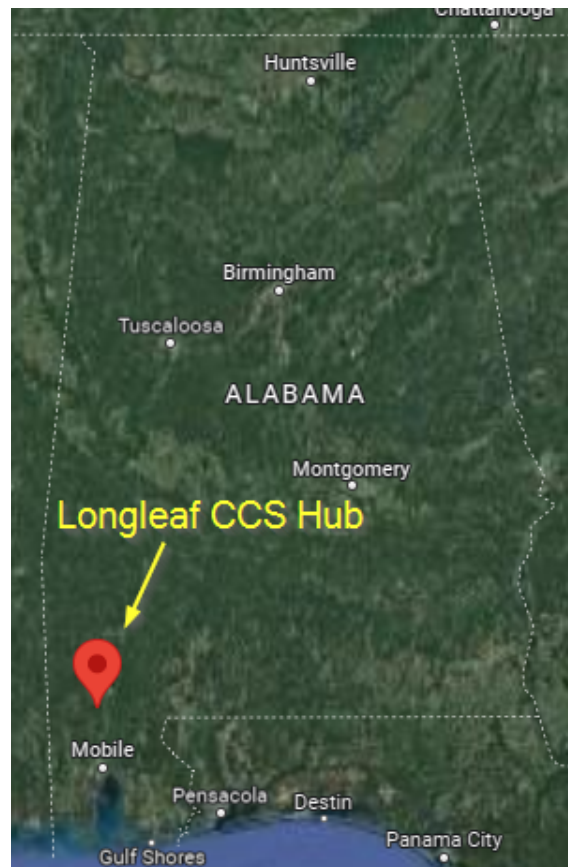


Figure 1: Location of Longleaf CCS Hub shown north of Mobile, AL

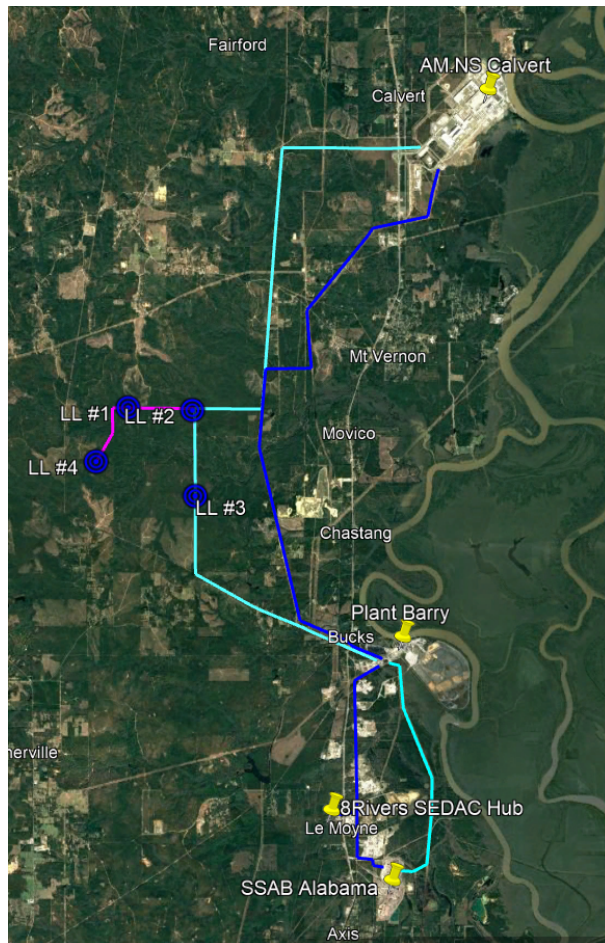


Figure 2: Overview of Pipeline Routes

3. RFP Process

- 3.1. Tenaska will weigh the relative merits of Proposals submitted by Respondents. The purpose of the RFP process is not necessarily to obtain the lowest possible cost; instead, the purpose of the RFP process is to identify the Respondent that will provide Tenaska with the most advantageous Proposal overall after considering the relevant evaluative factors.
- 3.2. Submission: All Proposals must be submitted electronically in PDF format by email to the following email address: work@longleafccs.com. Please also carbon copy (CC) the Primary Contact and Secondary Contact listed on the cover of this RFP. The email submission for all proposals should include the following subject line: "[RESPONDENT'S NAME], PROPOSAL FOR RFP-TNSK-2024-001, CONFIDENTIAL" in all capital letters.
- 3.3. Required Certifications: Each Respondent must include in its Proposal a signed copy of the Required Certifications found in Appendix B to this RFP.
- 3.4. Deadline and Receipt Proposals will be accepted until **April 12, 2024 April 19, 2024 at 5:00:00 p.m. (CDT)**. Tenaska may not accept Proposals received after this deadline. Respondents are responsible for ensuring that Proposals are timely received. Tenaska will send Respondents a confirmation email that the Proposal was received, and the confirmation email will include the time and date that the Proposal was received. If a Respondent does not receive a confirmation

email from Tenaska within twenty-four (24) hours of submitting its Proposal, the Respondent should then contact the Primary Contact and/or Secondary Contact listed on the cover of this RFP. Although Tenaska will accept all Proposals received by the deadline, Respondents are advised not to wait until the deadline to submit Proposals.

- 3.5. Each Respondent is advised to include all required information with its Proposal. Although Tenaska will evaluate all Proposals to the extent practicable, failure to include all of the information requested could affect Tenaska's evaluation of the Proposal and result in the Proposal's rejection. Tenaska reserves the right to reject any and all Proposals.
- 3.6. Questions: Please submit all questions concerning this RFP to Tenaska by email to work@longleafccs.com and CC the Primary Contact and Secondary Contact listed on the cover of this RFP. Do not contact any other person or persons with questions concerning this RFP.

4. Scope and Specifications

- 4.1. Tenaska envisions entering into a lump sum contract to perform the FEED study as more particularly described in the scope and specifications found in Appendix A – Pipeline FEED Study, which is attached to and made a part of this RFP.
- 4.2. The Respondent shall review this scope and, as part of the proposal, list any exceptions to these requirements.
- 4.3. Domestic Preference: If awarded a contract under this RFP, in fulfilling its obligations to Tenaska under such contract, the Respondent must adhere to the domestic preference provision found at 2 C.F.R. § 200.322, which provides to the greatest extent practicable a preference for the purchase, acquisition, or use of goods, products, and materials produced in the United States in connection with programs funded through Federal financial assistance awards. For infrastructure projects, section 200.322(d), directs recipients and their contractors to the regulations implementing the Build America Buy America Act preferences found in 2 C.F.R. pt. 184 and applicable Federal awarding agency regulations and guidance.

5. Minimum Qualifications

- 5.1. To be considered for this RFP, an Respondent must meet the following Minimum Requirements: (a) Respondent is registered to do business in Alabama and has all necessary general State and local business licenses (excluding any special permits or licenses that Respondent would need to obtain to perform the contract, provided such special permits or licenses can be obtained in a timely manner such as not to delay performance of the contract beyond the Performance Deadline); (b) and Respondent is not presently suspended, debarred, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal agency.

6. Ethics in Contracting

- 6.1. No Collusion: By submitting a Proposal, each Respondent represents and certifies that the costs in the Proposal were arrived at independently and without consultation, communication or agreement, for the purpose of restricting competition, with any other Respondent or competitor. Each Respondent further represents and certifies that, unless otherwise legally permitted, the costs that have been included in its Proposal have not been disclosed knowingly by the Respondent and will not knowingly be disclosed by the Respondent before the RFP's submission deadline to any other Respondent or competitor. In addition, each Respondent

represents and certifies that the Proposal has not and will not make any attempt to induce any person or business either to submit or not to submit a Proposal in connection with this RFP.

6.2. Prohibited Communications: No Respondent may communicate in any form (whether written, oral, or electronic) directly or indirectly with any director, officer, employee, or agent, of Tenaska for the purpose of influencing the selection or rejection of any Respondent or prospective contractor or otherwise to circumvent the selection process described in this RFP. However, a Respondent may communicate with the designated employee(s) or agent(s) of Tenaska for purposes specifically allowed under the terms of this RFP or otherwise allowed under Tenaska's policies. Failure to adhere to these restrictions may result in disqualification of the Respondent and rejection of the Respondent's Proposal.

6.3. No Gratuities or Favors Allowed: No Respondent will promise or provide any gratuities, favors, or anything of monetary value to any director, officer, employee, or agent of Tenaska for the purpose of influencing the consideration of the Respondent's Proposal in connection with this RFP. No director, officer, employee, or agent of Tenaska will solicit any gratuities, favors, or anything of monetary value from any Respondent.

7. Proposal Not an Offer

7.1. This RFP is issued to elicit responses and is not an offer. No contract or binding obligation on Tenaska may be implied from this RFP. No agreement will be formed between any Respondent and Tenaska unless and until a written agreement is executed by a selected Respondent.

8. Withdrawal

8.1. By written request to Tenaska at work@longleafccs.com, along with the Primary and Secondary Contact emails listed on the cover of this RFP, a Respondent may withdraw from the RFP process at any time before the deadline for submission of Proposals. After the deadline for submission of a Proposal in response to this RFP, a Respondent may not withdraw a Proposal for a period of fourteen (14) days after such deadline.

9. Legal Compliance

9.1. Respondent will obtain and maintain all licenses, permits, liability insurance, worker's compensation insurance, and comply with any and all other standards or regulations required by Federal, State, county, or municipal statutes, ordinances, and rules during the performance of any contract between Tenaska and the Respondent. Any requirement specifically included in any contract between Tenaska and the Respondent will be considered as a supplement to (and not as a substitute for) this Section.

10. Pricing

10.1. In estimating and preparing the cost for performing any contract under this RFP, the Respondent must base its pricing on the cost principles found in 2 C.F.R. pt. 200 or 2 C.F.R. pt. 910, as appropriate.

11. Proposal Expenses

11.1. The Respondent is responsible for all expenses associated with the preparation and submission of its Proposal and with participation in the RFP process. Respondent should not include any such expenses in its Proposal. The Respondent will not be reimbursed for such expenses under any circumstances.

12. Errors or Omissions

- 12.1. The Respondent and its authorized representatives are expected to fully inform themselves of the Specifications and any other conditions and requirements before submitting Proposals. Failure to do so will be at the Respondent's own risk.

13. FEED Study Contract Terms

- 13.1. Set forth below is a summary of several terms that will be included in the FEED study contract. Other terms and conditions will be consistent with the provisions of this RFP and terms as are customary for agreements for performance of FEED study work described herein.

13.2. Termination for Default

13.2.1. Should Respondent be awarded a contract but fail to fulfill its obligations in an effective and timely manner, Tenaska will have the right, in addition to other remedies, to terminate the contract by specifying the date of termination in a written notice of cancellation. Termination will become effective on the date as specified in the notice of cancellation. Tenaska also reserves the right to secure performance of the contract from other sources and hold the defaulting contractor responsible for any additional costs incurred.

13.3. Periodic Reporting

13.3.1. Throughout the duration of FEED study, the Respondent shall conduct weekly conference calls with Tenaska and provide regular written status update reports.

13.4. Insurance

13.4.1. The Respondent, if awarded a contract under the RFP, must secure and maintain, at its sole expense, throughout the term of the contract, insurance necessary to cover its performance under the contract. The Respondent accepts full responsibility for identifying and determining the types and extent of insurance necessary to provide reasonable financial protections for itself and Tenaska provided that the Respondent maintains the minimum coverages required under such contract. The minimum coverages required under the contract will be: (a) Commercial General Liability Insurance (including bodily injury, property damage, blanket contractual, and personal injury) with limits of not less than \$1,000,000 per occurrence and \$1,000,000 in the aggregate; (b) Commercial Automobile Liability Insurance (including owned, non-owned, leased, and hired motor vehicle coverage) with limits not less than \$1,000,000 combined single limit per occurrence; (c) Worker's Compensation Insurance at the appropriate statutory limits, including Employer's Liability coverage with limits of not less than \$1,000,000 for each accident, (d) Umbrella Liability Insurance with limits of not less than \$4,000,000 per occurrence and \$4,000,000 in the aggregate; and (e) Professional Liability Insurance with limits of not less than \$2,000,000 per claim and \$5,000,000 in the aggregate. Other insurance terms and conditions will be negotiated with the successful Respondent. **The Respondent must submit a current certificate of insurance evidencing these coverage minimums with its proposal.**

14. Discussions with Respondent

- 14.1. Tenaska may hold discussions with a Respondent submitting an acceptable or potentially acceptable Proposal. The purpose of such discussions is: (a) to promote understanding of the Respondent's Proposal in relation to Tenaska's needs, and (b) to facilitate the negotiation of a

contract most advantageous to Tenaska when considering the criteria and other requirements of the RFP.

15. Evaluative Factors

15.1. Tenaska will evaluate each Proposal that meets the Minimum Requirements on the following factors set forth below. Each criterion listed below is assigned a point value, which represents the maximum number of points that may be awarded for that criterion.

15.1.1. Cost (30 points): Respondent should propose the lump sum for which it will be paid for the scope.

15.1.2. Respondent's Prior Experience (20 points): Respondent should include in its Proposal a description of any demonstrated, proven record of successfully completing contracts similar and scope and complexity to the contract contemplated by this RFP in accordance with the Specifications in Appendix A.

15.1.3. Qualifications and Availability of Key Team Members (20 points): Respondent should identify each individual who would be performing the scope and include a description of each individual's experience and availability.

15.1.4. Proposal Quality & General Responsiveness (10 points): Respondent should provide a clear and complete explanation of the Respondent's approach to performing the contract in accordance with the Specifications in Appendix A and the other requirements. Respondent will be evaluated on the completeness of the Offeror's Proposal in response to the RFP and the extent to which the Offeror followed the instructions and other requirements specified in the RFP.

15.1.5. Schedule (10 points): Respondent should propose a guaranteed completion date (duration) for the work.

15.1.6. Financial Condition (5 points): Respondent should include in its Proposal a description of its financial capacity to comply with all requirements of the contract to be awarded under this RFP.

15.1.7. Disadvantaged Business Enterprise Criteria (5 points): Respondent should include in its Proposal a statement regarding its status as a small business, minority business, women's business enterprise, labor surplus area firm, or other disadvantaged, diverse, or historically under-represented business.

16. Selection

16.1. Tenaska will select the Respondent that Tenaska determines to be fully qualified under the criteria in this RFP and to have submitted the most advantageous Proposal. In addition, any Respondent selected must also satisfy the criteria for a responsible contractor possessing the ability to perform successfully under the terms and conditions of the proposed procurement in accordance with the requirements listed in 2 C.F.R. § 200.318.

17. Negotiation

17.1. Tenaska may conduct negotiations with one or more Respondents initially selected by Tenaska. Identification of a Respondent or Respondents for negotiation may not result in the award of a contract as Tenaska and the Respondent must first agree to mutually acceptable

contract terms and conditions. Any award will result in a contract incorporating all the requirements, terms, and conditions of the RFP and the Respondent's Proposal as negotiated.

18. Silence

- 18.1. The apparent silence of this RFP and any Specifications or supplemental materials as to any detail or the omission of a detailed description as to any point will be regarded as meaning that only the best commercial practices are to prevail.

19. Disclaimer

- 19.1. Tenaska reserves the right to waive technicalities and informalities. Tenaska reserves the right to re-advertise or terminate this RFP for any reason at any time before Tenaska awards a contract. Tenaska further reserves the right to cancel, recall, or reissue all or any part of this RFP at any time. This RFP does not commit Tenaska to selecting a Proposal, awarding a contract, paying any costs associated with the preparation of a Proposal, or procuring or contracting for any work whatsoever. Tenaska reserves the right, in its discretion, to accept or reject any or all responses to this RFP; to negotiate with all Respondents being selected for contract negotiations; and/or to not move forward with executing a contract with any party.

20. Termination for Default

- 20.1. Should Respondent be awarded a contract but fail to fulfill its obligations in an effective and timely manner, Tenaska will have the right, in addition to other remedies, to terminate the contract by specifying the date of termination in a written notice of cancellation. Termination will become effective on the date as specified in the notice of cancellation. Tenaska also reserves the right to secure performance of the contract from other sources and hold the defaulting contractor responsible for any additional costs incurred.

21. Timeline

- 21.1. The following timeline shows the anticipated schedule for the RFP and award process. The anticipated award date and the anticipated Commencement Date are merely estimates, and Tenaska is not obligated to award any contract under this RFP by the anticipated award date, nor is performance under any contract awarded promised or guaranteed to start by the anticipated Commencement Date.

- | | | |
|---------|--------------------|--------------------------------------|
| 21.1.1. | Proposals Due: | April 12 <u>19</u> , 2024 |
| 21.1.2. | Award Date: | May 3, 2024 |
| 21.1.3. | Commencement Date: | May 15, 2024 |

[END OF SECTION]

APPENDIX A

PIPELINE FEED STUDY

APPENDIX A - CO₂ PIPELINE FEED STUDY

(This plan specifically, or an equivalent similar plan, will be accepted assuming similar information is included.)

FEED study deliverables shall include, but not necessarily be limited to:

1. **Project Scope and Summary** that includes business objectives and a summary of the proposed project. This document must describe whether the transport infrastructure will be an open access or common carrier and how the proposed system(s) can help accelerate CCUS/CDR development.
2. **Project Parameters** including, but not limited to:
 - a. Site characteristics and ambient conditions;
 - b. CO₂ fluid compositions including maximum and minimum limits;
 - c. Land use, right-of-way, utility corridors, property boundaries, and title research;
 - d. Project execution plan that details the timeline, critical items, decisions points, and significant milestones necessary to advance the project through the stages of detailed design, procurement, construction, commissioning, and start-up.
3. **Engineering Design Package** that covers all proposed modes of transport within the system, including interconnection between modes (if applicable). The engineering design package shall include, but not be limited to:
 - a. **General (applicable to all transport modes)**
 - i. A Route Report and Maps, complete with:
 1. A Geographic Information Systems (GIS) database to house all route and survey information;
 2. Route map incorporating aerial photography, right-of-way and workspace, environmental features (waterways, streams, rivers, canals, lakes, wetlands, etc.), existing transportation infrastructure (roads, tunnels, highways, railroads, terminals, locks, ports), topography, elevation profiles, hydrological data, foreign crossings, and others;

3. Crossing and right-of-way investigation or survey including elevation, crossing methods, constructability, proposed mitigation, land use, access, workspace configuration, and other relevant information at key locations;
 4. Geotechnical and hydrotechnical investigations (desktop or field) that consider extreme weather scenarios and other ground movement force considerations;
 5. Wetland and environmental survey or investigation information;
 6. Cultural and archeological survey or investigation information;
 7. Population density study along the transport route and a preliminary High Consequence Area (HCA) determination;
 8. Site selection for aboveground facilities and construction laydown yards;
 9. Locations of both existing and proposed CO₂ sources, transfer facilities, and storage/conversion facilities; and
 10. Landowner engagement and land acquisition plan along the proposed route.
- ii. A Design Basis document that covers:
1. Applicable codes, regulations, standards, and specifications that govern the civil, structural, mechanical, process, electrical, and automation/controls designs;
 2. If no codes, regulations, standards, or specifications exist, alternatives that demonstrate equivalency shall be identified;
 3. Transport distance, transport mode, transport capacity, CO₂ phase, and permissible composition of CO₂ transported between each receipt/delivery point;
 4. Route selection process, including alternatives considered;
 5. Basis for the selected mode of transport;

6. Crossing design including waterways, roads, interstate highways, and railroads including horizontal directional drilling requirements;
 7. Integrity management and inspection;
 8. Supervisory Control and Data Acquisition (SCADA) System and Leak Detection System;
 9. Overpressure protection, venting during routine operations, and emergency venting;
 10. Building monitoring designs and equipment to detect and notify personnel of unsafe conditions;
 11. Metering and custody transfer;
 12. Operating and control philosophy;
 13. Infrastructure and/or rights of way intended for re-use;
 14. Provisions for future expansion; and
 15. A staffing plan for operation of the transport system.
- iii. Key Design Calculations and Drawings that cover:
1. Pressure design and Maximum Operating Pressure (MOP) determination;
 2. Overpressure protection;
 3. Mass and energy balance, including justification for proposed equation of state (EOS);
 4. An estimate of annual CO₂ releases from normal and emergency operations;
 5. Transport system and equipment sizing;
 6. Process flow diagram (PFD) and Utility flow diagram (UFD);
 7. Preliminary process and instrumentation diagrams (P&ID);
 8. Power requirements, sources, costs, and timing;
 9. Preliminary material take-off;
 10. Tie-in list;
 11. Demolition/removal drawings; and
 12. Preliminary drawing list and estimated drawing count for the detailed engineering phase.
- iv. Technical Specifications and datasheets for major materials, equipment, and activities, including but not limited to: rotating or static equipment, measurement facilities, leak detection, SCADA, controls, communications,

buildings, electrical substations, construction, surveying, and others.

- v. Risk management plan, complete with a risk register, a preliminary Hazard and Operability Analysis (HAZOP), and a preliminary cause and effect diagram.
- vi. If converting assets to CO₂ service, a preliminary conversion-to-service plan that includes an integrity assessment plan to demonstrate fitness for service and/or applicable regulatory compliance.
- vii. Additional critical safety and risk assessments:
 - 1. Conducting an Air Dispersion and Potential Impact Radius (PIR) study including terrain and overland flow considerations for determining the effect on any populated areas;
 - 2. Providing an Emergency Response Plan (ERP) including training and outreach for emergency responders and local communities, as appropriate;
 - 3. Consideration of additional safety critical equipment (e.g., emergency shutdown system, braking, maritime safety) and redundant safety design;
 - 4. Consideration of odorant additives for CO₂; and
 - 5. Consideration of additional distance for setback in populated areas.
- viii. Constructability review and construction specifications to meet applicable codes, regulations, and standards.
- ix. Environmental Specifications:
 - 1. Monitoring;
 - 2. Structures, such as for waterbody crossings, to minimize construction damage to the environment;
 - 3. Wetland, river, lake, major stream crossings and horizontal directional drills; and
 - 4. Soil erosion mitigation measures and structures and monitoring after construction for 1 year.
- x. Commissioning plans.
- xi. Procurement plan for long lead materials and equipment.
- xii. Plan for selection of contractors/subcontractors.
- xiii. Summary of lessons learned during FEED study execution.

b. Additional Deliverables for Pipelines

- i. A Route Report and Maps, complete with:

1. Geotechnical and hydrotechnical investigations (desktop or field) that consider extreme weather scenarios and other ground movement force considerations aligned with DOT PHMSA's Integrity Management Program and relevant advisory bulletins for all pipelines such as the June 2022 bulletin (Docket PHMSA-2022-0063) titled "Pipeline Safety: Potential for Damage to Pipeline Facilities Caused by Earth Movement and Other Geological Hazards;"⁴²
- ii. A Design Basis document that covers:
 1. Pipe specifications including fracture toughness criteria;
 2. Design criteria including metallurgical requirements to address ductile fracture propagation including length for fracture arrest based upon material;
 3. Material and pipe coating specifications including specifications for fracture arrest (maximum arrest distance) and selection;
 4. Cathodic protection including location of ground beds;
 5. Integrity management including inline inspection of the pipeline;
 6. Location of mainline valves for isolation including public safety, waterbody crossings and rupture isolation and detection;
 7. Supervisory Control and Data Acquisition (SCADA) System and Leak Detection System with pressure and flow monitoring including rupture mitigation valves (RMV) that will isolate pipeline segments within 30 minutes or less;
 8. Determination of Maximum Operating Pressure and Minimum Operating Pressure including placement of overpressure safety devices; and
 9. Pipeline "venting design" and location options at pump stations, mainline valves, and laterals for public safety.
 - iii. Key Design Calculations and Drawings that cover:

⁴² [PHMSA Land Movement Advisory Bulletin.pdf \(dot.gov\)](https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-05/PHMSA%20Land%20Movement%20Advisory%20Bulletin.pdf) - <https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/2022-05/PHMSA%20Land%20Movement%20Advisory%20Bulletin.pdf>

1. Experimentally verified thermo-hydraulic analysis (steady state and transient);
2. Preliminary alignment sheets; and
3. Pipeline facilities – Additional deliverables for transfer facilities apply (Section I.B.i.3.g).
- iv. Technical Specifications and datasheets for major materials and activities, including but not limited to: pumps, compressors, pigging facilities, pipe, and valves.
- v. If converting a pipeline to CO₂ service, a preliminary conversion-to-service plan for DOT PHMSA regulatory compliance that includes an integrity assessment plan to demonstrate fitness for service and/or applicable regulatory compliance for offshore pipelines.
- vi. Additional critical safety and risk assessments:
 1. Consideration of additional safety critical equipment and redundant safety design such as crack arrestors (or pipe toughness (Charpy Impact Value)) and enhanced shut off capabilities in the event of a catastrophic failure including mainline valve spacing and RMV locations.
- vii. Construction Specifications to meet 49 CFR Part 195:
 1. Right of way clearing, grading, and ditching;
 2. Depth of soil cover and minimum spacing from dwelling;
 3. Welding requirements;
 4. 100% Non-Destructive Testing of pipeline girth weld;
 5. Pressure testing per the requirements in 49 CFR 195.304;
 6. Coating;
 7. Backfill to protect the pipe and coating;
 8. Pipe Bending requirements; and
 9. Clean-up of the right of way.

c. Additional Deliverables for Rail

- i. NOT USED

d. Additional Deliverables for Truck

- i. NOT USED

e. Additional Deliverables for Barge

- i. NOT USED

f. **Additional Deliverables for Ship**

i. NOT USED

g. **Additional Deliverables for Transfer Facilities**

i. NOT USED

4. **Project cost estimate.** Design of the transport system shall support an itemized capital (CAPEX) and operational (OPEX) cost estimate consistent with AACE (Association of the Advancement of Cost Engineering) Class 3 with an expected accuracy range of -10% to -20% on the low side and +10% to +30% on the high side. The cost estimate should include a basis of estimate for each item. Successful applicants should provide a benchmark study for the overall cost estimate, if available. Successful applicants will be required to submit a transport buildout plan with a P-10, P-50 and P-90 project cost analysis based on the acquisition and installation of CO₂ transport networks that fulfill the Build America, Buy America Act provisions in the Bipartisan Infrastructure Law (BIL).

APPENDIX B

REQUIRED CERTIFICATIONS

APPENDIX B – REQUIRED CERTIFICATIONS

By submitting a Proposal to this RFP, the Respondent is making the following certifications as part of its Proposal and assures that it is and will remain in compliance with the conditions contained in these certifications.

Lobbying Certification

By submitting a proposal, the Respondent certifies, to the best of its knowledge, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The Respondent shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure. The contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Access to Records

If awarded a contract under this RFP, the Respondent agrees to provide Tenaska, the Federal awarding agency, Inspectors General, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the contractor which are directly pertinent to the contract for the purposes of making audits, examinations, excerpts, and transcriptions. The Respondent agrees to permit any of the foregoing parties or their authorized representatives to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed. The Respondent agrees to provide the foregoing parties or their authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

Disadvantaged Firms

If awarded a contract under this RFP, the Respondent must take all necessary affirmative steps to assure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible. Affirmative steps must include: (1) placing qualified small and minority businesses and women's business enterprises on solicitation lists; (2) assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources; (3) dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises; (4) establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and, (5) using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce. The Respondent further agrees to include a provision requiring such compliance by all subcontractors in its lower tier transactions and requiring that all subcontractors further flow down such compliance by including the same provision in their lower tier transactions.

Compliance with Federal Law

Respondent acknowledges that Federal financial assistance will be used to fund all or a portion of the contract. The Respondent will comply with all applicable Federal law, regulations, executive orders, policies, procedures, and directives.

Federal Program Fraud and False Statements

The Respondent acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Respondent's actions pertaining to any contract entered into under this RFP.

Federal Government Not Party

The Federal Government is not a party to any contract entered into under this RFP and is not subject to any obligations or liabilities to Tenaska, the Respondent, contractor, or any other party pertaining to any matter resulting from any contract.

Equal Employment

During the performance of any contract entered into under this RFP, to the extent applicable, the Respondent agrees as follows:

- (1) The Respondent will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Respondent will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Respondent agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The Respondent will, in all solicitations or advertisements for employees placed by or on behalf of the Respondent, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The Respondent will not discharge or in any other manner discriminate against any employee or

applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

Suspension and Debarment

This project is a covered transaction for purposes of 2 C.F.R. pt. 180. As such, the Respondent is required to verify that neither the Respondent, its principals (defined at 2 C.F.R. § 180.995), nor its affiliates (defined at 2 C.F.R. § 180.905), are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935). The Respondent must comply with 2 C.F.R. pt. 180, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction into which it enters. The Respondent hereby certifies that neither the Respondent nor any of its principals or affiliates is presently excluded (as defined at 2 C.F.R. § 180.940) or disqualified (as defined at 2 C.F.R. § 180.935) or proposed for suspension or debarment or otherwise declared ineligible for the award of contracts by any Federal agency. The Respondent agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C, throughout the period of any contract. The Respondent further agrees to include a provision requiring such compliance in its lower tier covered transactions. This certification is a material representation of fact relied upon by Tenaska. If it is later determined that the Respondent did not comply with 2 C.F.R. pt. 180, subpart C, in addition to remedies available to Tenaska, the Federal Government may pursue available remedies, including but not limited to suspension and debarment.

The undersigned is an authorized representative for the Respondent named above and hereby certifies that the information contained in this Proposal is accurate and complete.

Respondent

Respondent's Representative

Title

Printed Name

Date